

WINTER (J.T.)

al

JAUNDICE DURING PREGNANCY

BY

JOHN T. WINTER, M.D.,

Washington, D. C.

[Reprinted from the AMERICAN JOURNAL OF OBSTETRICS AND DISEASES
OF WOMEN AND CHILDREN, Vol. XXIII., No. 1, 1890.]



NEW YORK :
WILLIAM WOOD & CO., PUBLISHERS,
56 & 58 LAFAYETTE PLACE.
1890.

JAUNDICE DURING PREGNANCY

BY

JOHN T. WINTER, M.D.,

Washington, D. C.

[Reprinted from the AMERICAN JOURNAL OF OBSTETRICS AND DISEASES
OF WOMEN AND CHILDREN, Vol. XXIII., No. 1, 1890.]

NEW YORK :
WILLIAM WOOD & CO., PUBLISHERS,
56 & 58 LAFAYETTE PLACE.
1890.



JAUNDICE DURING PREGNANCY.¹

JAUNDICE is spoken of as constituting a distinct form of disease, and as such its diagnosis is easy; we have only to look upon our patient to know what the trouble is. It may proceed from a variety of causes, physical and mental—grief, fear, crude and indigestible substances taken into the stomach, miasma, exposure to high temperature, with pain, nausea, languor, and lassitude. This is the general train of symptoms which precede and attend idiopathic jaundice, and in perhaps a large majority of cases gastric derangement is a precursor of the attack, which is followed by the production of depraved chyme, between which and the bile, when it reaches the duodenum, there is no affinity. Hence the bile ceases to flow into the duodenum, not from any obstruction, but because there is no longer any attraction for it in the duodenum, and hence the biliary secretion is suspended. The shade of yellowness is different in different persons. Those who are pale and fair present a bright lemon color; those who are florid, or who are flushed with fever, will present a darker shade of yellow; while those suffering with any disease causing an imperfect arterialization of blood will be apt to be of a greenish hue. The latter, whether from imperfect circulation or from a greener color of the bile itself, is supposed to be the most unpromising. Jaundice, however, depends upon various and very different morbid conditions, which at times are involved in very great obscurity. It is to one of these morbid conditions, that of jaundice occurring during pregnancy, to which I wish to invite attention this evening.

There is of course the same characteristic yellowness of skin, owing to the presence of bile, or at least of its coloring

¹ Read before the Washington Obstetrical and Gynecological Society, June 7th, 1889.

matter, in the circulating fluid, and the deep color of the urine is derived, no doubt, from the same source; while, on the other hand, the paleness of the feces is ascribed to want of bile, which is usually found in healthy and natural excrement.

It is hardly necessary for me to try to show how bile or its coloring matter comes to be present in the blood. The general opinion, and perhaps the correct one, is that the bile, after being secreted, is reabsorbed and carried into the circulation and to the parts in which the change of color is observed.

One of the anatomical peculiarities of the liver should not be forgotten, and that is that it is supplied principally with venous blood, the hepatic artery supplying but a small quantity in comparison with that which is received from the portal system; and the bile, unlike all other animal secretions, is produced from venous blood which has already become contaminated by circulating through the capillaries of the stomach, spleen, pancreas, intestines, etc., and may be supposed to contain disorganized and effete ingredients.

The complete suppression of bile produces symptoms analogous to those which follow the suppression of urine, and the patient dies in a comatose condition. It would, therefore, appear that bile is not necessary or useful as a secretion, but is destined, like the urine, to be eliminated and discharged. Dalton, however, claims that this is not correct, and shows by experiment that bile is necessary for animal life—not only that it be secreted and discharged, but that it be discharged into the intestine and pass through the tract of the alimentary canal. In his experiments on dogs, fistulous openings were made into the gall bladder and the bile allowed to discharge externally, no part of it entering the intestinal canal. He says: "There was constant and progressive emaciation, which proceeded to such a degree that nearly every trace of fat disappeared from the body. The loss of flesh amounted to nearly one-half the weight of the animal. There was also a falling-off of the hair and an unusually disagreeable odor to feces and breath. The appetite remained good, and digestion was not interfered with; there was no pain, and death took place at last without any violent symptoms, but by a simple and gradual failure of the vital powers."

The appearance of jaundice in the pregnant woman is

usually explained as being most probably due to pressure on the ductus communis choledochus by the enlarged uterus, and by the transverse colon, which is not infrequently found at this time to be filled with feces. But if this is the true cause, why is jaundice not an accompaniment of all pregnancies? Mental emotion, I have no doubt, bears an important part in producing this disease, especially during the early months of gestation, for it is then that so many women become extremely nervous, and are sensitive to the slightest impressions, and not infrequently become depressed. It would be more reasonable to suppose that where the patient had been in poor health, either before she became pregnant or during the early months of gestation, the liver, owing to its proximity to the disturbing factors, suffering local congestion and other abnormal interference with its function, would be the organ most likely to yield to the pressure put upon it.

The puerperal state is ever one of care and anxiety. It is a well-known fact that diseases which, in the non-pregnant condition, are innocent in themselves, become during pregnancy the cause of most serious care. Jaundice is one of these. It can scarcely be said to be dangerous except to the pregnant woman, and to her it becomes one of exceeding gravity. The question might well be asked, Why is jaundice so prejudicial to the pregnant female? Is it only functional in character, only because of the substitution of blood deficient in some of the elements of nutrition for that of a more healthy character? Or must we look for a deeper-seated cause, arising in organic change in the liver, thus causing a contamination of the circulating fluid by noxious material which, in consequence of the failure of some important emunctory function, has not been eliminated, causing a true blood-poisoning? And if this latter be true, what is this poisonous principle which, during pregnancy, is so exceedingly dangerous to both mother and child?

It has been shown by Ellison, Bright, Lloyd, and others that an immense amount of fatty matter is sometimes discharged from the bowels during an attack of jaundice, which may, in a measure, account for the increased quantity of cholesterin found circulating in the blood during this disease.

Dr. Nelson, of Charlottesville, Va., says "cholesterin is in-

creased in quantity during pregnancy, and that if, in addition to the increase of this noxious element and the general hyperemic condition of the pregnant female, the secretory function of the liver be arrested from atrophy, glandular degeneration, or any other cause, we have all the conditions necessary to the worst form of cholemic eclampsia."

Flint claims that the real cause of coma in cholemia will be found in the direct action upon the cerebro-spinal system of some poisonous element of the bile which the liver has failed to eliminate, which accumulates in the blood, and by its action on the brain produces coma, and may, and no doubt does, produce convulsions by its action upon the spinal cord and medulla oblongata, giving rise to true cholemic eclampsia.

Dalton says "cholesterin resembles the fats in many respects, but is not saponifiable by the action of alkalies; that it originates in the substance of the brain and nervous tissue, is absorbed by the blood, conveyed to the liver, and discharged with the bile into the intestine, where it is supposed to be transformed into some other substance, as it is not discharged with the intestinal fluids."

Great conflict of opinion seems to exist upon the clinical and prognostic significance of jaundice in pregnancy.

Playfair says that "jaundice may occur during pregnancy without any unfavorable or untoward results," while Dr. Roberts claims that it is highly dangerous.

Watson says that "icterus occasionally comes on during pregnancy, and disappears after childbirth," while Meigs tells us that any form of toxemia occurring during utero-gestation might be said to be a dangerous complication.

Bedford does not regard jaundice as a disease of peril, but says "the same thing cannot be said with regard to the integrity of the gestation. Miscarriage and premature delivery are apt to ensue; the system is thrown into perturbation by the presence of an element in the blood well calculated to interrupt the harmony of action so essential to healthy and safe gestation."

Dr. Charles E. Smith, of St. Paul, Minn., gives a synopsis of ten cases of jaundice occurring in pregnant women at a time when there were an unusual number of non-pregnant persons suffering with the disease. He says "the product of

conception was lost in all but one case, and that three of the mothers died, all by coma, while in almost every instance in the non-pregnant the disease yielded readily to treatment."

Prof. Lebert, of Zurich, reports seven cases, of which five proved fatal, but he does not state whether the children were born alive or not.

Dr. Chamberlain, in the *New York Medical Record*, 1871, reports a case in which the disease commenced with diarrhea and vomiting twenty-four hours before labor began, at which time a disease of the liver did not occur to him; that after delivery there were mania and sopor, and death occurred on the second day post-partum; that "the child was in a semi-narcotized condition for six weeks, with persistent constipation, and a sulphurous odor from the skin."

Bedford, in alluding to a very fatal form of jaundice which occurred on the island of Martinique in 1858, says: "The termination of the disease was almost always fortunate except where pregnancy existed. The disease always assumed but one grave form, always the same, always fatal—the comatose form. Among thirty pregnant females affected with jaundice, ten only arrived at the completion of pregnancy; the other twenty died in coma after abortion or premature labor. Until the commencement of coma there was nothing peculiar to note. Almost all of the twenty children were dead-born, a few lived for an hour or two, only one survived; none of them were jaundiced."

From the foregoing it might be said that although bile and cholesterin are essential to health, and when circulating through legitimate channels do no harm to the system, let them become displaced and travel in channels to which they do not belong, and very soon disquiet and commotion assume the place of healthy action. The failure of the liver to eliminate the poisonous elements of the bile, constituting cholemia, or of the kidney to eliminate the urea, constituting uremia, gives rise to blood-poisoning as surely as the absorption of pus or the inoculation of the system with variolous matter.

The symptoms of blood-poisoning cannot be explained by mere compression; if so, the relief afforded by emptying the gravid uterus would remove the malady. Such, however, is

not the case, as fatal symptoms do not occur, as a rule, until after delivery.

Every case of jaundice occurring in pregnancy should, therefore, be looked upon as a serious one, jeopardizing both mother and child. It would seem probable that a simple catarrhal jaundice occurring from exposure to cold, from indigestion, from pressure, etc., is changed for some reason into a disease of a more malignant character, terminating not infrequently in abortion, coma, and convulsions, and proving fatal in a majority of instances to both mother and child.

The death of the fetus and its expulsion should not surprise us when we remember that the only source from which it can obtain sustenance is loaded with poisonous elements ; and as the death of the mother rarely ever occurs until several hours after the expulsion of the fetus, there seem good grounds for believing that her death is due in many instances to shock, caused by labor, on a system already brought down by impaired nutrition and impoverished blood.

The following interesting case occurred in my own practice :

Mrs. R., 31 years of age, pregnant for the fifth time. Former labors perfectly natural. Has had several slight malarial attacks since last confinement. For the first three months, this time, there was nausea and vomiting to a far greater degree than ever before, scarcely a day passing without considerable discomfort from this cause. During the fourth month there was no particular indisposition. About the beginning of the fifth month she had a slight malarial attack, which gradually passed off, to return about the beginning of the sixth month in an aggravated form ; the fever, remittent in character, gradually grew worse until the seventeenth day of the sixth month of pregnancy, when there was noticed for the first time a slight yellowness of skin and conjunctivæ, which gradually deepened in color until it assumed a greenish hue.

There was now a very decided gastric disturbance, nausea, vomiting of a dark bilious matter, pain, especially in right side and shoulder, constipation, violent headache, and a loathing of proper food, but a craving for pickles and acid fruits. She was violently ill for six or eight days, and then gradually improved, so that by the fifteenth day the jaundice had entirely disappeared and she was nearly well again. On this fifteenth day after the jaundiced condition was first noticed, the sixth month of pregnancy having been completed but a few days, labor came on, and after six hours she was delivered of a

female child, premature by nearly three months and weighing a little less than two pounds. The child moaned feebly and swallowed with difficulty the few drops of fluid placed in its mouth, and acted as well as looked premature. It gradually improved, so that by the third day it was able to take nourishment from its mother's breast, which it continued to do for two weeks; and then the milk, disagreeing with the child, was examined and was found loaded with bile, so much so as to give it a yellow color. A wet-nurse was employed, but the child died when twenty-one days old. The mother gradually improved, and has since passed through two pregnancies and confinements without any unpleasant accompaniments or results, the last confinement occurring on the second day of last March.

